

PART V

CROPS

Major Crops

Principal crops in Pend Oreille County are hay and small grains. Most of the cropland is devoted to feed crops because agriculture in the county is composed mostly of raising livestock and dairying. The relatively short growing season of the area limits crops that can be grown on a commercial scale to the hardier plants. Fruits and vegetables, therefore, are not common in the county. Harvested cropland in Pend Oreille County amounted to 16,317 acres in 1959. Most of the county's crops rely on nature for water and only about 11 percent of the harvested cropland was reported irrigated in 1959.

In 1962, more alfalfa hay was grown in Pend Oreille County than any other single crop. About 5,800 acres were devoted to the production of alfalfa hay in 1962. Second ranking crop in the county in terms of acreage was clover-timothy hay. Clover-timothy was harvested from 3,800 acres in 1962. Other hays including grass silage are important among the crops grown in the county. Oats totaled 1,700 acres in 1962 and it is the most important small grain grown in the county. Barley and wheat are also grown but on a lesser scale.

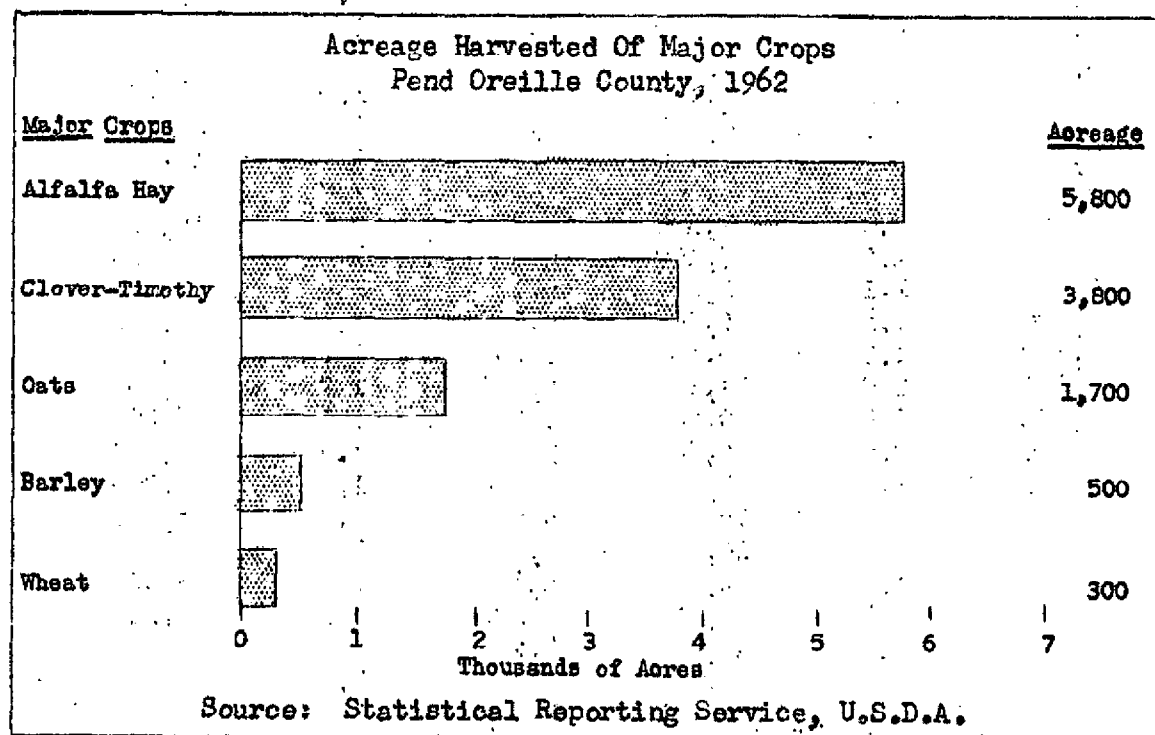


Figure 9. Major Crop Acreages, Pend Oreille County, 1962.

Crop Trends

A number of trends are apparent in the acreages Pend Oreille County farmers have planted to leading crops. These changes are part of an increasing emphasis in the area's livestock farming and the development of dairying. Pend Oreille County agriculture through specialization has become increasingly more valuable

to the regional economy. The area has continued to specialize in hay and small grains although the acreages of some of these crops have decreased over the years. Other crops such as potatoes, fruits, berries and vegetables have declined over the years.

Hay Crops

For many years the most important crop in Pend Oreille County from the acreage standpoint has been hay. According to the Census of Agriculture, land from which hay was cut amounted to 13,696 acres in 1959.

Table 16. Alfalfa Hay and Clover-Timothy Hay
Acreage, Yield and Production
Pend Oreille County, 1939-1962

Year	Alfalfa Hay			Clover and Timothy Hay		
	Harvested Acres	Yield (Tons Per Acre)	Production (Tons)	Harvested Acres	Yield (Tons Per Acre)	Production (Tons)
1939	3,700	1.5	5,600	6,200	.9	5,600
1940	3,900	1.5	5,800	6,900	1.1	7,700
1941	3,800	2.5	9,500	8,200	1.6	13,200
1942	3,700	2.7	10,000	8,000	1.2	9,900
1943	4,200	1.7	7,100	8,800	.8	6,900
1944	4,000	1.4	5,600	8,800	1.0	8,700
1945	4,000	1.7	6,900	8,400	1.9	16,100
1946	4,200	1.8	7,700	8,000	2.2	17,200
1947	3,800	1.6	6,200	7,500	2.0	15,000
1948	3,700	2.0	7,400	6,900	2.2	15,000
1949	4,400	1.6	7,100	6,500	1.0	6,500
1950	4,200	1.1	4,600	6,100	1.0	6,100
1951	4,700	1.4	6,700	5,600	.8	4,500
1952	5,100	1.7	8,800	5,800	1.1	6,300
1953	5,600	2.0	11,100	5,200	1.2	6,500
1954	5,900	1.8	10,600	4,700	1.1	5,200
1955	6,000	2.0	12,000	5,100	1.4	7,000
1956	6,500	1.8	11,700	7,300	1.0	7,300
1957	6,800	2.2	14,900	5,500	1.5	8,300
1958	7,800	2.1	16,400	5,000	1.2	6,000
1959	5,600	1.5	8,400	4,600	1.2	5,500
1960	5,700	1.4	8,200	4,400	1.2	5,200
1961	5,400	2.0	10,600	4,200	1.3	5,500
1962	5,800	2.0	11,400	3,800	1.4	5,200

Source: Statistical Reporting Service, U.S.D.A.

The most prominent single crop in the county is alfalfa hay. In 1939, there were 3,700 acres devoted to alfalfa compared with 5,800 acres in 1962. A peak of 7,800 acres was reached in 1958. Alfalfa production amounted to 11,400 tons in 1962. Yields have been relatively good from the county's nonirrigated acreages because sufficient ground moisture has been available for alfalfa and other deep-rooted crops. Some of the county's alfalfa fields are watered by means of flood-irrigation.

In 1959, nearly 55 percent of Pend Oreille County farms reported growing alfalfa. Most dairy and beef cattle farmers grow their own alfalfa. Although the bulk of the crop is used on the farm where grown, some farmers do produce it for the commercial market. Of the 204 farms which grew alfalfa in 1959 there were 42 that reported sales of hay off the farm. About 16 percent of the harvested tonnage was sold during the year.

The largest concentration of alfalfa in the county is located in the vicinity of Ione. Most of the crop, however, is grown on scattered acreages throughout the south-central part of the county.

In the past, more acreage was devoted to clover-timothy hay in Pend Oreille County than any other crop. Since 1944, acreage has slowly decreased from 8,800 acres to 3,800 acres in 1962. It now ranks second in the county in terms of acreage.

According to the 1959 Census of Agriculture, clover-timothy hay was grown on 114 Pend Oreille County farms. Most clover-timothy produced is used on the farm where harvested. In 1959, only 29 farms reported the sale of clover-timothy hay and about 12 percent of the total production was sold off the farm that year. Clover-timothy hay is grown largely on lowlands south of Ruby located in the central part of the county.

Wild hay has been relatively important in Pend Oreille County for many years. Production, however, has gone down recently. Census data reveal that wild hay was harvested from 1,718 acres in 1959 whereas the total amount cut involved 3,543 acres in 1954 and 3,633 acres in 1949. Yields per acre are generally low, amounting to less than a ton. In 1959, 1,331 tons of wild hay were cut. Nearly all of the wild hay is used on the farm where it is harvested.

Some of the small grain grown in the county is cut for hay. In 1959, small grain harvested for hay amounted to 786 acres and production totaled 936 tons. Also in 1959, silage made from grasses, alfalfa, clover or small grains totaled 1,453 tons from 330 acres. Other hays amounting to 806 tons were cut from an additional 805 acres in that same year.

Small Grains: Oats, Barley, Wheat and Rye

As a group, small grains constitute the second most important crop in Pend Oreille County in terms of acreage. According to the Census of Agriculture of 1959, about 2,800 acres were devoted to oats, barley and wheat which represented 17 percent of the county's total harvested cropland. In 1962, the total acreage of these small grains amounted to 2,500 acres.

Oats

As an individual crop, oats ranked third in the county in terms of acreage in 1962. During the early 1950's, more oats were grown in the county than any other single crop. Since 1939, the oat acreage has fluctuated between a low of 970 acres in 1957 and a high of 6,800 in 1954. Oat acreage has dropped from the 1954 high to 1,700 acres in 1962.

Variations in climatic conditions have caused oat yields to vary from 25 bushels per acre in 1956 to 50 bushels per acre in 1947. In 1962, Pend Oreille

County's oat production totaled 59,500 bushels. Average yield amounted to 35 bushels per acre that year.

According to the Census of Agriculture, 59 Pend Oreille County farms reported having oats in 1959. Farms growing oats decreased in numbers after 1954 when 129 were counted. Oats are grown in the Gusick Flats and in the Calispell Valley.

Table 17. Oats and Wheat: Acreage, Yield and Production
Pend Oreille County, 1939-1962

Year	Oats			All Wheat		
	Harvested Acres	Yield (bushels per acre)	Production (bushels)	Harvested Acres	Yield (bushels per acre)	Production (bushels)
1939	3,400	30.0	102,100	1,000	14.9	14,900
1940	3,500	25.0	87,500	1,000	14.0	14,000
1941	3,200	32.0	102,400	600	12.9	7,750
1942	3,600	36.0	129,600	800	15.0	12,000
1943	3,700	30.0	111,000	1,000	15.0	15,000
1944	3,400	28.5	96,900	980	16.3	16,000
1945	4,000	28.5	114,000	500	20.0	10,000
1946	3,100	39.0	120,800	600	21.7	13,000
1947	3,300	50.0	165,000	700	16.4	11,500
1948	4,400	33.0	145,200	1,300	23.8	31,000
1949	4,400	30.0	132,000	3,900	14.6	56,800
1950	4,400	47.0	206,800	1,400	13.6	19,000
1951	4,800	34.0	163,200	1,100	16.9	18,600
1952	5,400	41.5	224,100	1,200	20.5	24,600
1953	5,300	41.0	217,300	1,520	27.1	41,200
1954	6,800	37.5	255,000	1,200	22.6	27,100
1955	5,500	37.0	203,500	1,190	19.7	23,400
1956	4,900	25.0	122,500	300	29.0	8,700
1957	970	35.0	34,000	410	23.5	9,630
1958	1,430	39.0	55,800	300	15.7	4,700
1959	1,700	34.0	57,800	620	18.9	11,690
1960	1,350	24.0	32,400	670	12.6	8,450
1961	1,200	27.5	33,000	420	26.4	11,080
1962	1,700	35.0	59,500	300	23.3	7,000

Source: Statistical Reporting Service, U.S.D.A.

Wheat

Wheat is the second most important grain crop in Pend Oreille County. Acreage has ranged between 300 and 3,900 since 1939. In 1962, the wheat acreage totaled 300 acres--17 percent winter wheat and 83 percent spring wheat. Since 1952, more acreage has been annually devoted to spring wheat than to winter wheat in Pend Oreille County.

Pend Oreille County's wheat yields have fluctuated greatly in recent years. In 1960, 12.6 bushels per acre were harvested compared with 26.4 bushels per acre in 1961 and 23.3 bushels per acre in 1962. In 1962, total wheat production in Pend Oreille County amounted to 7,000 bushels, consisting of 5,500 bushels of spring wheat and 1,500 bushels of winter wheat.

Several varieties of wheat are grown in Pend Oreille County. In 1962, 78.6 percent of the wheat production was composed of the Common White variety while the rest was of the White Club class.

Table 18. Winter Wheat and Spring Wheat
Pend Oreille County, 1939-1962

Year	Winter Wheat			Spring Wheat		
	Harvested Acres	Yield (Bushels per Acre)	Production (Bushels)	Harvested Acres	Yield (Bushels per Acre)	Production (Bushels)
1939	220	8.7	1,920	780	16.6	12,980
1940	300	16.7	5,000	700	12.9	9,000
1941	200	18.8	3,750	400	10.0	4,000
1942	300	18.3	5,500	500	13.0	6,500
1943	100	20.0	2,000	900	14.4	13,000
1944	120	6.9	830	860	17.6	15,170
1945	300	20.0	6,000	200	20.0	4,000
1946	400	20.5	8,200	200	24.0	4,800
1947	100	20.0	2,000	600	15.8	9,500
1948	900	28.9	26,000	400	12.5	5,000
1949	2,300	16.0	36,800	1,600	12.5	20,000
1950	400	26.0	10,400	1,000	8.6	8,600
1951	700	18.0	12,600	400	15.0	6,000
1952	600	21.0	12,600	600	20.0	12,000
1953	720	30.0	21,600	800	24.5	19,600
1954	200	25.5	5,100	1,000	22.0	22,000
1955	200	18.0	3,600	990	20.0	19,800
1956	60	25.0	1,500	240	30.0	7,200
1957	30	40.0	1,200	380	22.5	8,550
1958	40	30.0	1,200	260	13.0	3,380
1959	290	13.0	3,770	330	24.0	7,920
1960	270	15.0	4,050	400	11.0	4,400
1961	200	40.0	8,000	220	14.0	3,080
1962	50	30.0	1,500	250	22.0	5,500

Source: Statistical Reporting Service, U.S.D.A.

In 1959, 11 Pend Oreille County farms reported growing winter wheat while 23 were enumerated with spring wheat. Farms with wheat are located mainly in Cusick Flats area.

Barley and Rye

Barley ranks third in importance among the small grains grown in Pend Oreille County. Between 1939 and the mid-1950's, land devoted to barley increased tenfold from 100 to 1,000 acres. Since then, however, this acreage has been reduced 50 percent to 500 acres in 1962. Yields have varied from 10 bushels per acre in 1960 to 39 bushels per acre in 1959. The total amount of barley harvested in 1962 amounted to 17,500 bushels.

In 1959, 25 farms reported growing barley, a decrease from the 31 counted in 1954. Barley is grown in the same general areas as are oats and wheat in the

south-central part of the county.

Rye has never attained real importance in Pend Oreille County. The peak was 300 acres in 1939. Not since 1956 when 50 acres were harvested has there been any measurable land devoted to this grain in the county.

Table 19. Rye and Barley: Acreage, Yield and Production
Pend Oreille County, 1939-1962

Year	Rye			Barley		
	Harvested Acres	Yield (bushels per acre)	Production (bushels)	Harvested Acres	Yield (bushels per acre)	Production (bushels)
1939	300	14.3	4,300	100	28.0	2,800
1940	190	12.1	2,300	150	22.0	3,300
1941	230	7.8	1,800	220	35.0	7,700
1942	220	8.0	1,760	450	32.0	14,400
1943	190	11.1	2,100	490	32.0	15,700
1944	170	8.2	1,400	330	28.5	9,400
1945	110	11.8	1,300	260	25.0	6,500
1946	80	12.0	960	250	22.0	5,500
1947	50	10.0	500	380	34.5	13,100
1948	20	12.5	250	410	30.0	12,300
1949	--	--	--	400	13.0	5,200
1950	--	--	--	800	23.0	18,400
1951	--	--	--	600	24.0	14,400
1952	10	9.0	90	800	33.0	26,400
1953	30	10.0	300	850	30.0	25,500
1954	10	8.0	80	1,000	33.0	33,000
1955	30	6.7	200	1,000	28.0	28,000
1956	50	8.5	420	430	23.0	9,890
1957	--	--	--	500	22.0	11,000
1958	--	--	--	400	15.0	6,000
1959	--	--	--	500	39.0	19,500
1960	--	--	--	500	10.0	5,000
1961	--	--	--	700	21.0	14,700
1962	--	--	--	500	35.0	17,500

Source: Statistical Reporting Service, U.S.D.A.

Potatoes

Potatoes have been a minor crop since pioneer days of Pend Oreille County. Census figures show a drop in potato growing since 1920 when 425 acres were harvested. In more recent years, total land devoted to growing potatoes has ranged between 10 to 20 acres. Pend Oreille County farmers have found it difficult to compete with the large-scale potato growers of the irrigated Columbia Basin and elsewhere. Many farms today do not even raise potatoes for home use.

Table 20. Potatoes: Acreage, Yield and Production
Pend Oreille County, 1949-1962

Year	Harvested Acres	Yield (Hundredweight Per Acre)	Production (Hundredweight)
1949	40	70	2,800
1950	50	80	4,000
1951	40	80	3,200
1952	40	90	3,600
1953	25	96	2,400
1954	25	120	3,000
1955	25	80	2,000
1956	25	120	3,000
1957	20	100	2,000
1958	20	80	1,600
1959	10	60	600
1960	10	60	600
1961	20	50	1,000
1962	20	50	1,000

Source: Statistical Reporting Service, U.S.D.A.

Other Crops: Fruits, Berries, Vegetables and Nursery Products

Fruit, berry, vegetable and nursery production is on a very small scale in Pend Oreille County. Main drawbacks to the large commercial growing of these crops in the area is its short growing season and distance from population centers.

According to the Census of Agriculture, the acreage of orchards and vineyards in Pend Oreille County has steadily decreased over the last thirty years. In 1930, 156 farms reported a total of 88 acres in orchard fruits and vineyards. By 1959, the Census counted only 7 acres devoted to tree fruits and grapes on 10 farms. Farms with less than 20 trees and grapevines were not included in the Census enumeration in 1959. The small production of fruits and grapes in the county has been largely for home use.

Berries also are among the minor crops grown in Pend Oreille County that have decreased in importance. Only 2 acres of strawberries and one acre of raspberries were reported in the county in 1959.

Some vegetables are raised on Pend Oreille County farms but mainly harvested for home use. In 1959, 212 farms reported vegetables for home use whereas only one farm reported vegetables harvested for sale. Among the vegetables grown were cabbages, dry onions and carrots.

In 1959, only 3 farms in Pend Oreille County sold nursery and greenhouse products valued at over \$2,000. Cut flowers, potted plants, florist greens and breeding plants were the major products grown for sale. Total sales of nursery products off the farm in the county in 1959 amounted to \$5,150.

Table 21. Number of Farms, Land in Farms and Cropland Harvested, By Size of Farm, Pend Oreille County, 1959

Size of Farm	Number of Farms	Land in Farms (acres)	Cropland Harvested (acres)
Under 10 acres	5	15	---
10 to 49 acres	35	1,085	219
50 to 69 acres	19	1,115	299
70 to 99 acres	30	2,444	470
100 to 139 acres	32	3,769	837
140 to 179 acres	60	9,486	1,595
180 to 219 acres	24	4,782	840
220 to 259 acres	31	7,339	1,274
260 to 499 acres	64	23,170	3,688
500 to 999 acres	42	28,621	2,888
1,000 or more acres	<u>24</u>	<u>42,413</u>	<u>4,207</u>
Total	366	124,239	16,317

Source: U. S. Census of Agriculture, 1959.